Applic. No.: 09/283,907

Marked-Up Version of the Amended Claims:

Claim 1(amended). A method of separating two layers of material from one another and substantially completely preserving each of the two layers of material, the method which comprises:

providing two layers of material having an interface boundary between the two layers;

providing a sacrificial layer at the interface boundary, the sacrificial layer being formed of a material having an optical band gap smaller than a band gap of one of the two layers;

irradiating the interface boundary between the two layers or a region in vicinity of the interface boundary with electromagnetic radiation through one of the two layers;

absorbing the electromagnetic radiation at the interface or in the region in the vicinity of the interface with the sacrificial layer and [inducing a material at the interface boundary to decompose] decomposing the sacrificial layer; and

separating the two layers of material.

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Claim 12 (amended). [The process according to claim 8, wherein the semiconductor body consists] A method of separating two layers of material from one another and substantially completely preserving each of the two layers of material, the method which comprises:

providing two layers of material having an interface boundary between the two layers, one of the two layers of material being a substrate and the other of the two layers of material being a semiconductor body formed at least partially of a material selected from the group consisting of GaN, AlN, InN, mixed crystals thereof, layer sequences, layer structures, and component structures thereof;

irradiating the interface boundary between the two layers or a region in vicinity of the interface boundary with electromagnetic radiation through [one of the two layers] the substrate;

absorbing the electromagnetic radiation at the interface or in the region in the vicinity of the interface and inducing a material at the interface boundary to decompose; and

separating the two layers of material.

Claim 13 (amended). [The process according to claim 2, wherein the sacrificial layer consists] A method of separating two

layers of material from one another and substantially completely preserving each of the two layers of material, the method which comprises:

providing two layers of material having an interface boundary between the two layers;

providing a sacrificial layer at the interface boundary, the sacrificial layer formed at least partially of a nitride material selected from the group consisting of GaN, AlN, InN, and mixed crystals thereof;

irradiating the interface boundary between the two layers or a region in vicinity of the interface boundary with electromagnetic radiation through one of the two layers;

absorbing the electromagnetic radiation at the interface or in the region in the vicinity of the interface with the sacrificial layer and decomposing the sacrificial layer; and

separating the two layers of material.

Claim 28 (amended). [The method according to claim 26, wherein the component is a semiconductor laser, and the method further comprises] A method of producing a freestanding semiconductor laser structure, which comprises:

separating the semiconductor laser structure from a substrate during or after a manufacture thereof and substantially completely preserving the material of the semiconductor laser structure and the substrate, including:

providing two layers of material having an interface boundary between the two layers, one of the two layers of material being a substrate and the other of the two layers of material being a semiconductor laser structure;

irradiating the interface boundary between the two layers or a region in vicinity of the interface boundary with electromagnetic radiation through the substrate;

absorbing the electromagnetic radiation at the interface or in the region in the vicinity of the interface and inducing a material at the interface boundary to decompose; and

separating the two layers of material; and

producing an optical resonator of the semiconductor laser structure by cleaving a freestanding component structure along crystallographic lattice planes of epitaxial layers.